Minutes of the Meeting of Board of Studies (BoS) of Data Science Department, was held on 10th September, 2022 at 3.00 PM at AI Lab, D J Sanghvi College of Engineering.

The following members were present:

1. Dr. Ajaya Kumar Panda, Associate Professor, NITIE, Mumbai - Academic expert
2. Prof. Argha Das, Associate at Morgan Stanley – Industry Expert
3. Ekta Shah, Senior Machine Learning Engineer, Quantiphi –Alumni
4. Prof. Sarada Samantaray, HOD (PG) and Associate Dean, Data Science Department
5. Dr. Siba Panda, HOD (UG), Assistant Professor, Data Science Department
6. Prof. Jaykrishna Joshi, Assistant Professor, Data Science Department
7. Dr. Rajni Aron, Assistant Professor, Data Science Department

Leave of absence is granted to the following member:

1. Dr. Alka Mahajan, Dean, MPSTME, NMIMS University
2. Dr. Prasad Ramanathan, Senior Director, Capgemini – Industry Expert

1. The BoS members confirmed the minutes of meetings of BoS in Data Science held on 16th April, 2022.

2. The BoS members considered and deliberated upon the revision in the curricula of B Tech Data Science and MBA Tech Data Science. They approved the following:

    A. A minor revision of curricula of B Tech Data Science and MBA Tech Data Science by way of –
        I. Revision in course structure of B Tech Data Science and MBA Tech Data Science for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 **(Encl. - Ia)**

        II. Revision in the course structure of B Tech Data Science for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 **(Encl. - Ib)**

    B. Revision in Teaching & Examination Scheme and syllabus of the following courses of B Tech Data Science, Semester IV for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23 **(Encl.-II)**

        ➢ All the courses are approved in earlier AC meetings

    C. Introduction of Teaching & Examination Scheme of MBA Tech Data Science, Semester IV for the students admitted in AY 2021-22 and direct second year students admitted in AY 2022-23. Syllabi of all the courses are approved and adopted from B Tech Data Science **(Encl.-III)**

D. Introduction of Teaching & Examination Scheme and Syllabi of all the courses for B Tech Data Science, Semester VI for the students admitted in AY 2020-21 and direct second year students admitted in AY 2021-22 **(Encl.-IV)**

    A. Computer Vision and Applications

    B. Applications of Machine Learning

    C. Advance Data Structure for Analytics

    D. Department Elective – III (Any One)

        a. Quantitative Finance

        b. Marketing Strategy and Analysis

        c. Non-parametric Statistical Inference

        d. Supply chain and Analytics

BoS Committee suggestions: -

1. Computer Vision and Applications - Include "Introduction to deep learning for computer vision" in the syllabus.

Action Taken: -

The above suggestion is incorporated in the revised curriculum

3. The BoS members considered and deliberated upon the revision in the curricula of B Tech Integrated (Data Science). They approved the following:

    A. Revision in the course structure of B Tech Integrated (Data Science) for the students admitted in AY 2021-22 onwards **(Encl. - Ic)**

    • All the courses of the SEM I to VI are adopted from B Tech Integrated Computer Engineering and SEM VII to XII are adopted from B Tech Data Science.

    B. Introduction of Teaching & Examination Scheme of all the courses for B Tech Integrated (Data Science), Semester IV for the students admitted in AY 2021-22 onwards. **(Encl.-V)**

4. The BoS members considered and deliberated upon the revision in the curricula of **M Tech in Data Science (Business Analytics)**. They approved the following:

    A. Revision in course structure of M Tech Data Science (Business Analytics) for the students admitted in AY 2022-23 **(Encl.-Id)**

    B. Revision in course structure of M Tech Data Science (Business Analytics) for the students admitted in AY 2021-22 **(Encl.-Ie)**

    C. Revision in Teaching & Examination Scheme of M Tech Data Science Semester II and IV for the students admitted in AY 2022-23 and 2021-22 respectively.

        I. Change in the name of subject 'Advanced Statistical Learning' to 'Advanced Statistics', and revision in syllabus, in semester II **(Encl.-VI)**

        • Advanced Statistics - Focus is more on Statistical models for inference between variables and hence change in name was suggested.

266

II. Change in credit of subject 'Internship/ Project' from 15 to 12 and revision in syllabus in semester IV **(Encl.-VIII)**

- Internship/ Project - In order to maintain the overall credits of the entire program, the restructuring of credits was done.

➢ The above suggestions were approved by the BoS members.

5. The BoS members considered and deliberated upon the revision in the curricula of **M Tech Artificial Intelligence**. They approved the following:

A. Revision in course structure of M Tech Artificial Intelligence for the students admitted in AY 2022-23 **(Encl.-If)**

B. Revision in course structure of M Tech Artificial Intelligence for the students admitted in AY 2021-22 **(Encl.-Ig)**

C. Revision in Teaching & Examination Scheme of M Tech Artificial Intelligence Semester II and IV for the students admitted in AY 2022-23 and 2021-22 respectively.

I. Change in credits from 3 to 4 and revision in syllabus of the following courses in semester II **(Encl.-VII)**

- Computer Vision
- Advanced Statistical Learning
- Deep Learning

➢ The above suggestions are made to cover all the topics in detail.

II. Change in credit of subject 'Internship/ Project' from 15 to 12 and revision in syllabus semester IV **(Encl.-VIII)**

- Internship/ Project - In order to maintain the overall credits of the entire program, the restructuring of credits was done

➢ The above suggestions were approved by the BoS members.

Chairperson
Dean, Board of Studies

SVKM's NMIMS Deemed-to-be University
Mukesh Patel School of Technology Management and Engineering

Minutes of the Meeting of Board of Studies (BoS) of Data Science Department, was held on 3rd December, 2022 at 1.00 PM at AI Lab, D J Sanghvi College of Engineering.

The following members were present:
1. Dr. Ajaya Kumar Panda, Associate Professor, NITIE, Mumbai - Academic expert
2. Mr. Bhargave Shreyas, Director (Technology), Capgemini – Industry Expert
3. Ekta Shah, Senior Machine Learning Engineer, Quantiphi –Alumni
4. Prof. Sarada Samantaray, HOD (PG) and Associate Dean, Data Science Department
5. Dr. Siba Panda, HOD (UG), Assistant Professor, Data Science Department
6. Prof. Jaykrishna Joshi, Assistant Professor, Data Science Department

Leave of absence is granted to the following member:
1. Dr. Alka Mahajan, Dean, MPSTME, NMIMS University
   Comments and suggestions received prior and incorporated
2. Dr. Prasad Ramanathan, Senior Director, Capgemini – Industry Expert

1. The BoS members confirmed the minutes of meetings of BoS in Data Science held on 10th September, 2022.

2. The BoS members considered and deliberated upon the revision in the curricula of B Tech Data Science and MBA Tech Data Science. They approved the following:
   A. Revision in the Teaching & Examination Scheme and Syllabus of the course "**Python for Data Analysis**" in Semester II from 0,4,0,2 to 1,2,0,2 (L,P,T,C) for B Tech and MBA Tech in Data Science, for the students admitted in AY 2023-24 onwards. All the courses are approved in earlier AC meetings **(Encl.-I & II)**

   B. Minor revision in Course Structure and Teaching and Examination schemes for B Tech Data Science, semester III and IV for the batch admitted in the academic year 2022-23 onwards. **(Encl.-III & IV)**
      - The courses "**Management Accounting for Engineers**" is shifted from semester III to semester IV.
      - The courses "**Database Management Systems**" is shifted from semester IV to semester III.

   C. Introduction of Teaching and Examination Scheme of MBA Tech Data Science Semester V, for the students admitted in AY 2021-22 onwards. Syllabi of all the courses are adopted and are approved in earlier AC meeting. **(Encl.-V)**

   D. Approval of Teaching & Examination Scheme for B Tech Data Science of Semester VI for the students admitted in AY 2021-22 onwards for a course "Interpersonal Skills". **(Encl.-VI)**

   E. Introduction of Teaching and Examination Scheme and Syllabi of the following courses of B Tech Data Science, Semester VII and VIII for the students admitted in AY 2020-21 onwards **(Encl.-VII)**
      i. Neural Networks and Deep Learning
      ii. Speech and Natural Language Processing
      iii. Big Data Analytics (Syllabus common with Computer and AI program)
      iv. MLOps
      v. Department Elective - IV & V

246
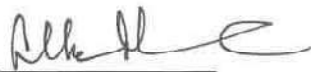
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    a. Advanced Database Management Systems
    b. Advanced Computer Vision
    c. DevOps (Syllabus common with AI program)
    d. Metaverse
    e. Reinforcement Learning (Syllabus common with AI program)
    f. Quantum Machine Learning

vi. Capstone Project (Syllabus is common scheme and syllabus at institute level as approved in BOS of AI)

Suggestions given by BoS members–

- Ms. Ekta shah suggested to keep encoder and decoder models in "Speech and Natural Language Processing" which was agreed upon by other members as well. The above suggestions are incorporated into the revised curriculum.

- Mr. Shreyas Bhargave suggested that in future we should introduce electives like Sustainable AI, Carbon emission in Technology etc. The above suggestions will be incorporated in the curriculum and will be placed for deliberation in the next BoS meeting.

3. The BoS members considered and deliberated upon the revision in the curricula of B Tech Integrated Data Science. They approved the following:

    A. Introduction of course structure and revision in Teaching & Examination Scheme for semester I & II, B Tech Integrated Data Science for students admitted in 2023-24 onwards. **(Encl.-VIII and IX)**
       i. The courses of "**Electrical and Computer Workshop**" is shifted from semester II to I
      ii. The course "**Mechanical workshop**" is replaced by "**3D Printing Workshop**" and shifted from semester I to II.

    B. Revision in Teaching & Examination Scheme for the course below courses for Semester III of B Tech Integrated Data Science, for the students admitted in AY 2022-23 onwards. The syllabus approved in BoS of Computer department **(Encl.-X and XI)**
      - Change in the credit structure of course "**C Programming**" in Semester III from 2,2,0,3 to 2,2,1,4 (L,P,T,C)
      - The courses "**Chemistry-II**" is shifted from semester III to IV
      - The course "**Constitution of India**" is shifted from semester IV to III

    C. Introduction of Teaching and Examination Scheme of B Tech Integrated Data Science Semester V, for the students admitted in AY 2021-22 onwards. Syllabi of all the courses are adopted and are approved in BoS of Computer Engg. **(Encl.-XII)**

Chairperson
Dean, Board of Studies

247